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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/544,614	04/06/2000	Christophe Le Roy	ATOCH-174	9121

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EXAMINER	
RHEE, JANE J	

ART UNIT	PAPER NUMBER
1772	

DATE MAILED: 01/13/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/544,614	Applicant(s) LE ROY ET AL.	
	Examiner Jane J Rhee	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-26 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-26 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. The term "MFI" in claim 1 is a relative term which renders the claim indefinite. The term "MFI" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-9,14-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adur et al. (4460632) in view of applicant's admitted prior art (specification pg 3 lines 8-15).

Adur et al. discloses 30 parts of polymer (A), 10%wt (col. 6 lines 39) of high density polyethylene (A1) of with a density of 0.940-0.965 (col. 2 lines 13-14) and a melt flow index of 1.5g/10min (col. 5 line 21), 20%wt (col. 6 lines 37) of low density polyethylene (A2), and 70 parts (col. 6 line 36) of polyethylene (B) of relative density of 0.93 to 0.94 cografted with 0.05-25wt% of unsaturated carboxylic acid (col. 4 lines 8-9).

Adur et al. discloses a layer (E) directly attached to the binder consisting of saponified ethylene-vinyl acetate copolymer (EVOH) or metal (col. 4 lines 15-18). Adur et al. discloses a rigid hollow body/gasoline tank made of a multilayer structure according to the composition described above (col. 4 line 60). Adur et al. discloses that the polyethylene (A1) is a polyethylene homopolymer or an ethylene copolymer with a comomoer of alpha-olefin having from 3-30 carbon atoms (col. 2 lines 10-13). Adur et al. discloses that the unsaturated carboxylic acid is an alkyl methacrylate wherein the alkyl group has 1 to 24 carbon atoms (col.3 lines 29-31). Adur et al. discloses that polymer (A2) is an ethylene copolymer with a comonomer of propylene or 1-octene (col. 2 lines 24-25). Adur et al. fail to disclose that the blend of polymer (A) and polymer (B) have a relative density of 0.930-0.940 and a melt flow index of between 5 and 100g/10min. Adur et al. fail to disclose that the amounts of (A1) and (A2) are 60-95 parts of weight of (A1) for 40 to 5 parts by weight of (A2). Adur et al. fails to disclose that the binder contains 5-20 parts by weight of (A) per 95 to 80 parts by weight of (B). Adur et al. fails to disclose a HDPE layer, a layer of the binder, either a layer of EVOH or an EVOH alloy or a polyamide-based layer, a second layer of the binder and an HDPE layer. Applicant's admitted prior art teaches that Petrol tanks usually consist of five layers consisting respectively of high density polyethylene, a binder, a polyamide or a copolymer having ethylene units and vinyl alcohol units (EVOH), a binder, HDPE.

Adur discloses the same composition for the coextrusion binder as the applicant therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided the blend of polymer (A) and (B) with a

density of 0.930-0.940 and a melt index of between 5 and 100g/10min, 60-95 parts of weight of (A1) for 40 to 5 parts by weight of (A2), 5-20 parts by weight of (A) per 95 to 80 parts by weight of (B). since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art in absence of unexpected results. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

It would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided Adur et al. with a HDPE layer, a layer of the binder, either a layer of EVOH or an EVOH alloy or a polyamide-based layer, a second layer of the binder and an HDPE layer in order to have provided a petrol tank as taught by Applicant's admitted prior art (specification Page 2 lines 8-15).

3. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adur et al. (4460632) in view of Nagano (4397916).

Adur et al. discloses the binder composition described above. Adur et al. fail to disclose that the layer (E) is a polyamide resin comprising at least one structural unit of PA-6; PA-6;6; PA-6-10; PA-11; PA-6/6,6; or PA-12. Adur et al. fail to disclose that the layer (E) is the saponified ethylene-vinyl acetate copolymer having a degree of saponification of about 90-100mol%. Adur et al. fail to disclose that layer (E) is the polyester resin of polyethylene terephthalate, polybutylene terephthalate, polyethylene naphthenate, or a blend thereof. Nagano et al. discloses that the layer (E) is a polyamide resin comprising at least one structural unit of PA-6; PA-6;6; PA-6-10; PA-11; PA-6/6,6; or PA-12, a saponified ethylene-vinyl acetate copolymer having a degree of

saponification of about 90-100mol%, a polyester resin of polyethylene terephthalate, polybutylene terephthalate, polyethylene naphthenate, or a blend thereof for the purpose of increasing the adhesive strength between two layers (col. 1 lines 31-32).

Therefore, it would have been obvious to one of ordinary skill in the art to have provided Adur et al. with a layer (E) of a polyamide resin comprising at least one structural unit of PA-6; PA-6;6; PA-6-10; PA-11; PA-6/6,6; or PA-12, a saponified ethylene-vinyl acetate copolymer having a degree of saponification of about 90-100mol%, a polyester resin of polyethylene terephthalate, polybutylene terephthalate, polyethylene naphthenate, or a blend thereof in order to increase the adhesive strength between two layers (col. 1 lines 31-32).

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adur et al. (4460632) in view of Toft et al. (6436547).

Adur et al. discloses the binder composition described above. Adur et al. fail to disclose that polymer (A2) is a metallocene polyethylene. Toft et al. teaches metallocene polyethylene for the purpose of obtaining tight seals and gas tightness of a packaging container (col. 6 lines 26-32).

It would have been obvious to one of ordinary skill in the art to have provided Adur et al. with metallocene polyethylene in order to obtain tight seals and gas tightness of a packaging container (col. 6 lines 26-32) as taught by Toft et al.

Response to Arguments

5. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane J Rhee whose telephone number is 703-605-4959. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Jane Rhee
January 8, 2003

HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772
1/8/03